

San Diego I-5 CSMP – LOSSAN Rail Corridor Analysis *Findings*

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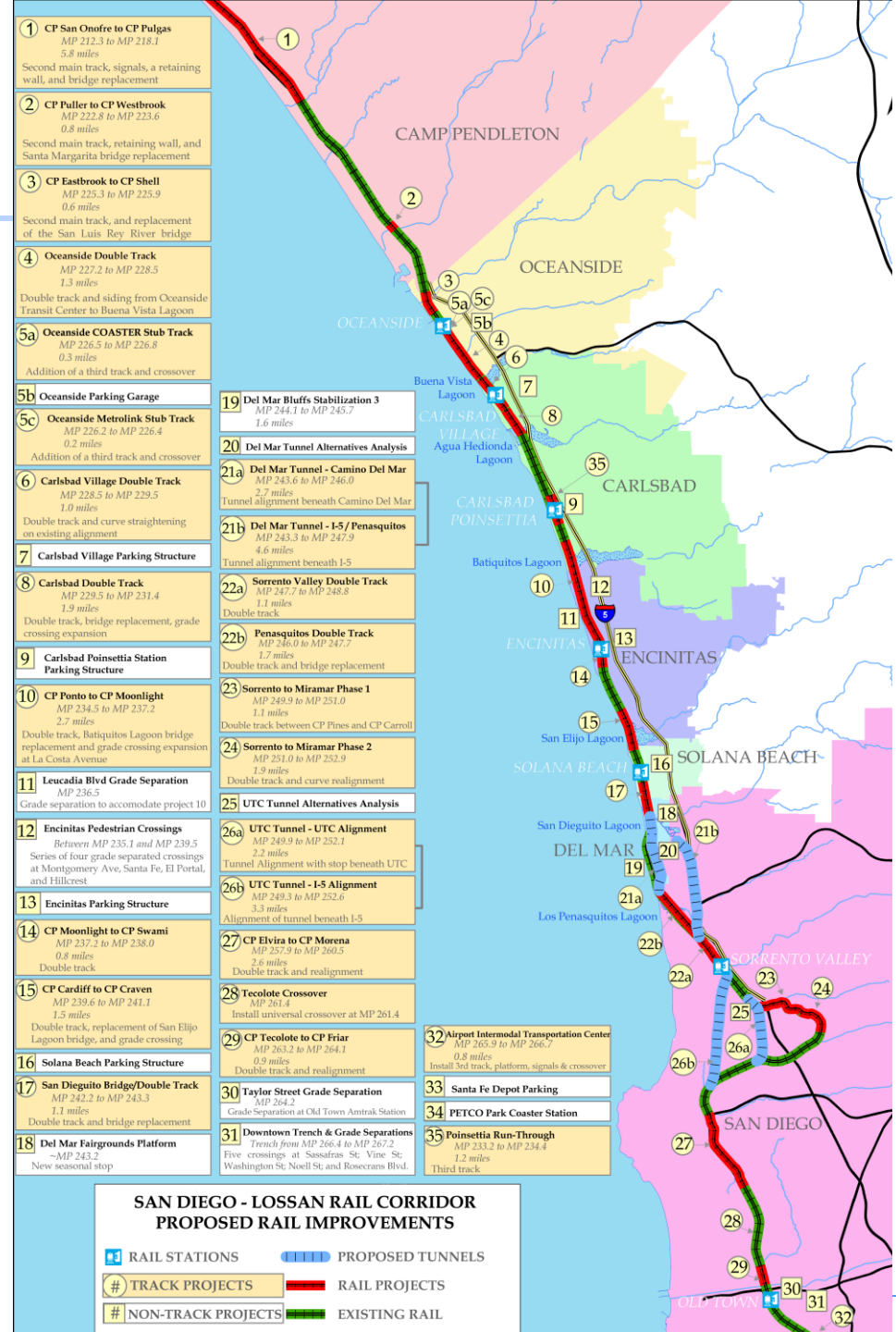
Overview

- **Background**
- **Process**
- **Integrated Program**
- **Track Project Phasing**
- **Other Key Issues**

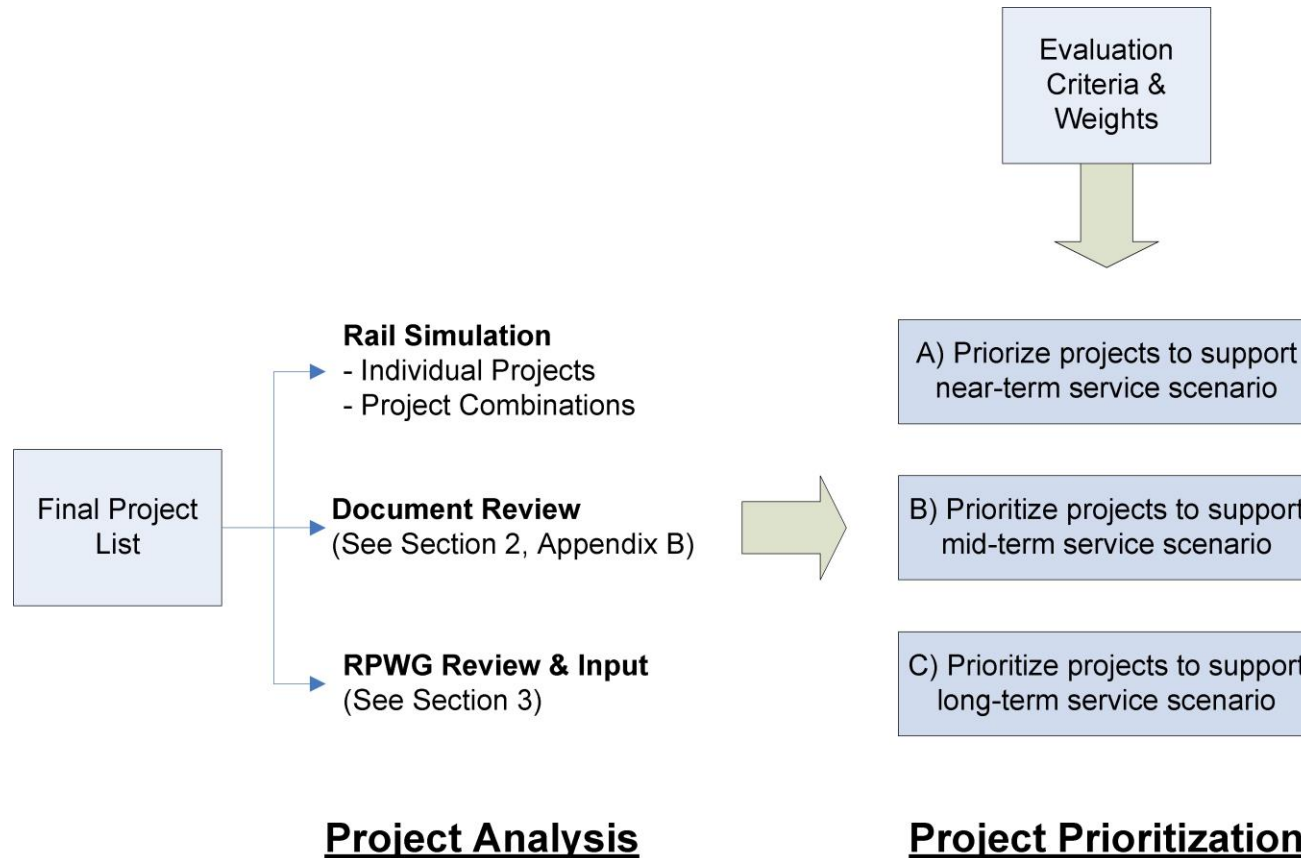
Background

- **Corridor System Management Plans**
- **Key Precursor Work**
- **Working Group**
- **Projects**

Prioritized Projects



Evaluation Process



Final Performance Category Weights

Performance Category	Evaluation Criteria	Category Weights	
		Track	Other
Project Cost	<ul style="list-style-type: none"> • Total Project Cost • Operating Cost 	25%	35%
Project Delivery	<ul style="list-style-type: none"> • Funding Status • Project Status • Impacts on Existing Service • Community Support 	20%	25%
Rail Performance	<ul style="list-style-type: none"> • Freight Train Accommodation • Travel-Time Savings • Passenger Rail Delay Cost • Passenger Rail OTP • Dispatch Variation • Fuel Cost 	40%	–
Roadway Performance	<ul style="list-style-type: none"> • Station Area Congestion • At-Grade Crossing Time 	5%	10%
Environmental	<ul style="list-style-type: none"> • Emissions • Proximity to Protected Areas 	10%	20%
Safety	<ul style="list-style-type: none"> • Risk Exposure 	–	10%

Service Driven Plan

Weekday Trains

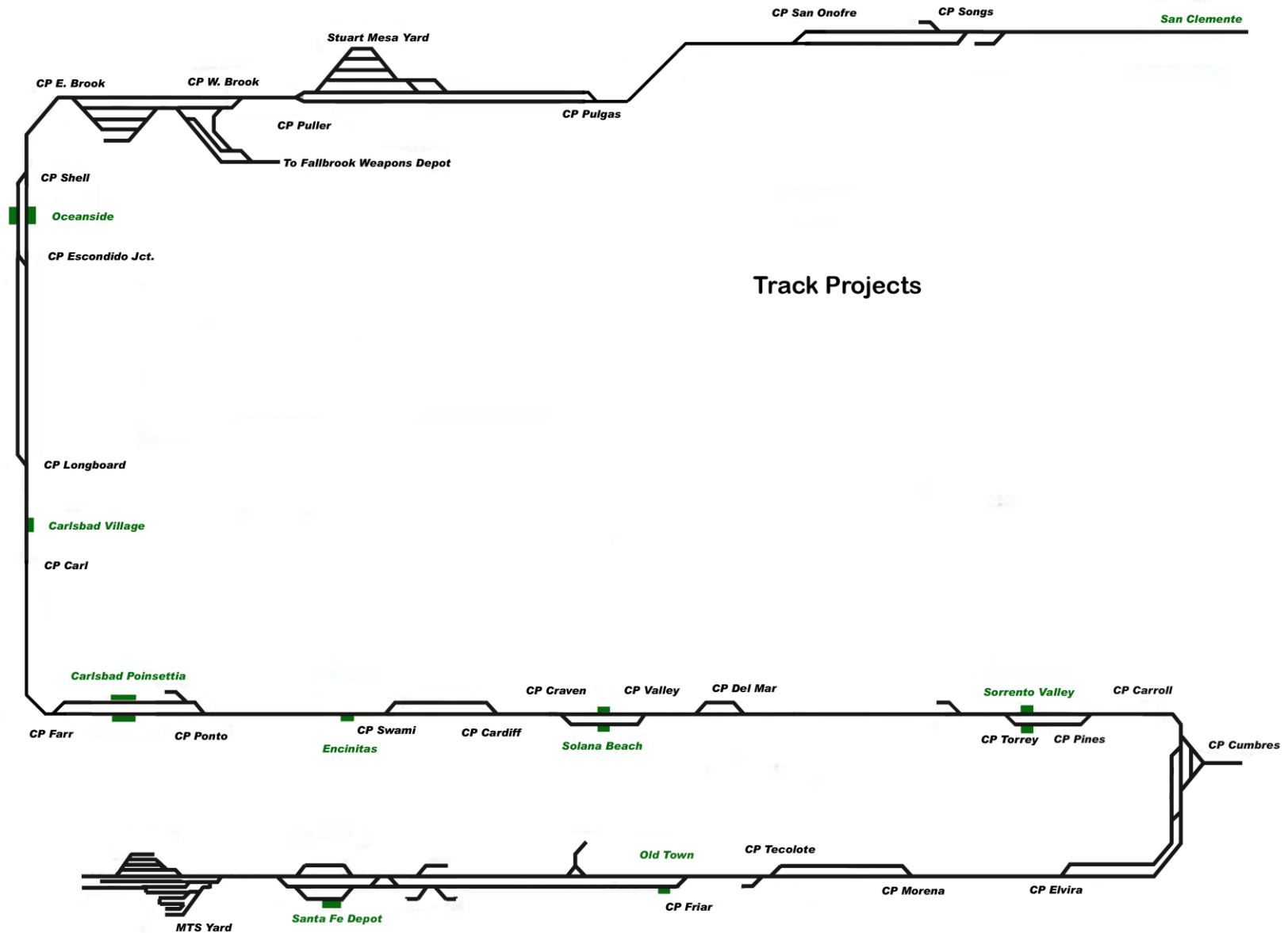
	Existing	Near-Term Service Expansion	Mid-Term Service Expansion	Long-Term Service Expansion
Amtrak	22 – 24	26	32	36
COASTER	22 - 26	30	36	54
Metrolink	16	16	16	20
BNSF	5-7	7	9	9
Total	65 – 73	79	93	119

Integrated Service and Investment Program

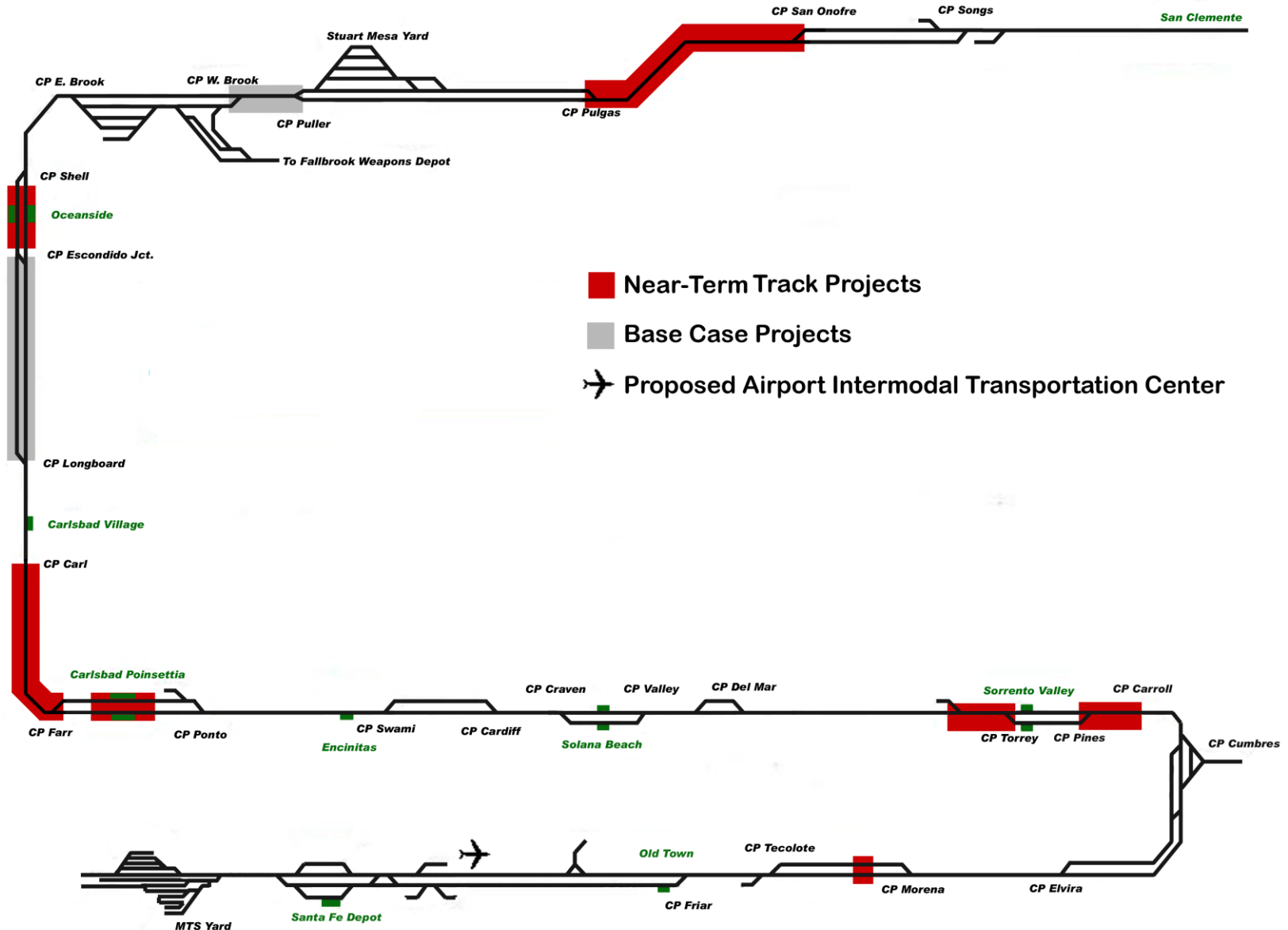
	SERVICE VISION		INFRASTRUCTURE NEEDS				
	WEEKDAY TRAINS	ANNUAL TRIPS ²	TRACK PROJECTS	NON-TRACK PROJECTS	EQUIPMENT/OTHER NEEDS	TOTAL COST	
Existing (2008)	Amtrak	22-24	N/A	N/A	N/A	N/A	
	COASTER	22-26					
	Metrolink	16					
	BNSF	5-7					
	TOTAL:	65-73					
		2.84 Million					
Near-Term Service Expansion	Amtrak	26	#1 – CP San Onofre to CP Pulgas #5a – Oceanside COASTER Stub Track #5c – Oceanside Metrolink Stub Track #8 – Carlsbad Double Track #22a – Sorrento Valley Double Track #23 – Sorrento to Miramar Phase I #28 – Tecolote Crossover #35 – Poinsettia Run-Through Subtotal: \$130 Million	NONE Subtotal: \$0	• Add 5 th COASTER Equipment Set • Add 4 th Layover Track • Expanded Track and Equipment Maintenance • Schedule Modification Subtotal: \$15 Million	Capital Cost:	\$145 Million
	COASTER	30				Additional Annual Cost:	\$1 Million
	Metrolink	16					
	BNSF	7					
	TOTAL:	79					
		3.32 Million					
Mid-Term Service Expansion	Amtrak	32	#3 – CP East Brook to CP Shell #5 – Carlsbad Village Double Track #15 – CP Cardiff to CP Craven #27 – CP Elvira to CP Morena Subtotal: \$210 Million	#12 – Encinitas Pedestrian Crossings #13 – Encinitas Parking #16 – Solana Beach Parking #33 – Santa Fe Depot Parking Subtotal: \$63 Million	• Add 6 th COASTER Equipment Set • Expanded Track and Equipment Maintenance • Schedule Modification Subtotal: \$13 Million	Capital Cost:	\$286 Million
	COASTER	36				Additional Annual Cost:	\$2 Million
	Metrolink	16					
	BNSF	9					
	TOTAL:	93					
		4.07 Million					
Long-Term Service Expansion	Amtrak	36	#10 – CP Ponto to CP Moonlight #14 – CP Moonlight to CP Swami #17 – San Dieguito Bridge/Double Track #24 – Sorrento to Miramar Phase II #29 – CP Tecolote to CP Friar Subtotal: \$280 Million	#5b – Oceanside Parking #7 – Carlsbad Village Parking #9 – Carlsbad Poinsettia Parking Subtotal: \$63 Million	• Add 7 th COASTER Equipment Set • Add 4 th Passenger Track at Santa Fe Depot • Add 5 th Layover Track • Expanded Track and Equipment Maintenance • Schedule Modification Subtotal: \$19 Million	Capital Cost:	\$362 Million
	COASTER	54				Additional Annual Cost:	\$5 Million
	Metrolink	20					
	BNSF	9					
	TOTAL:	119					
		5.07 Million					

²Annual boardings in San Diego County

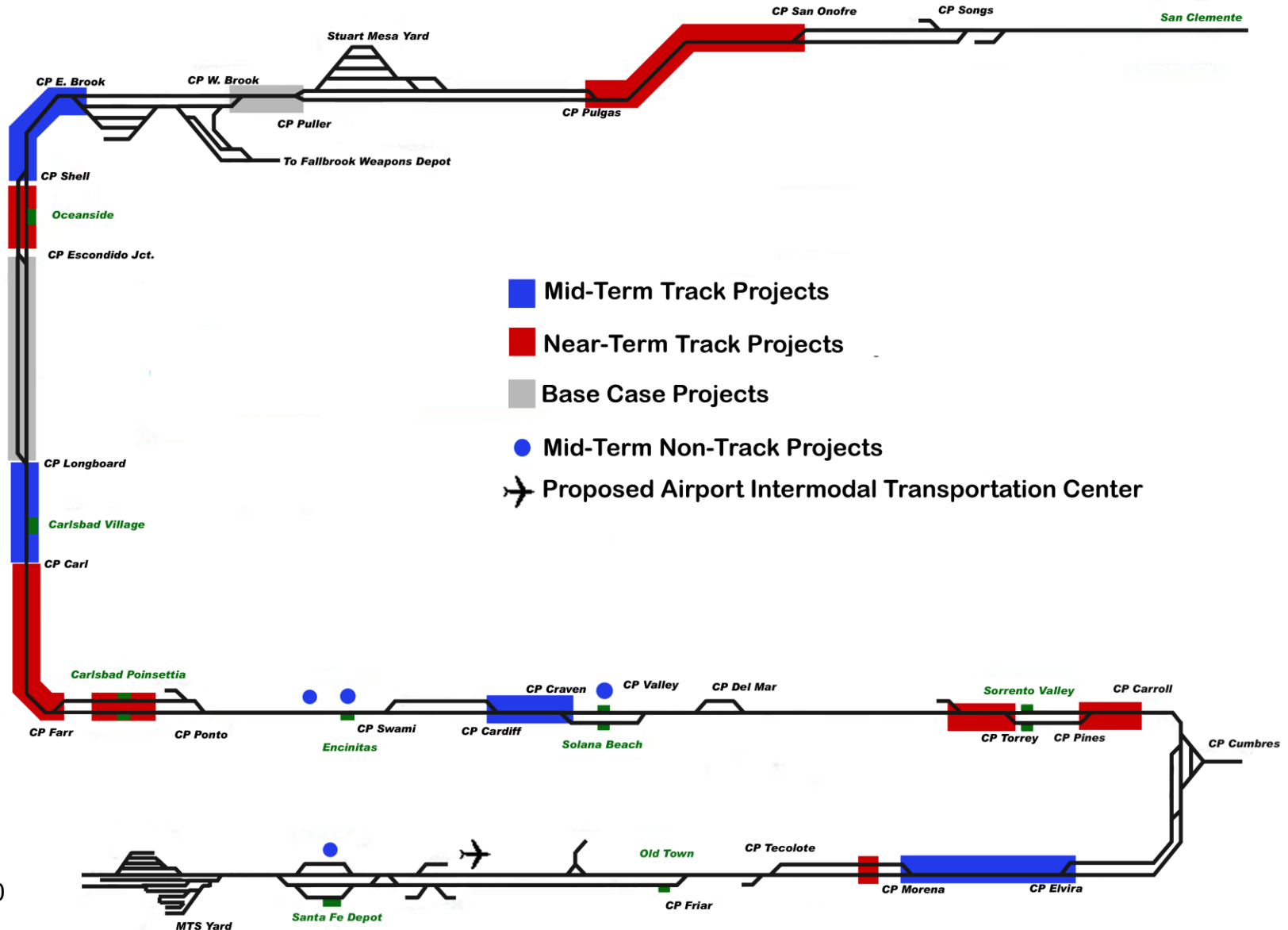
Existing Track Configuration



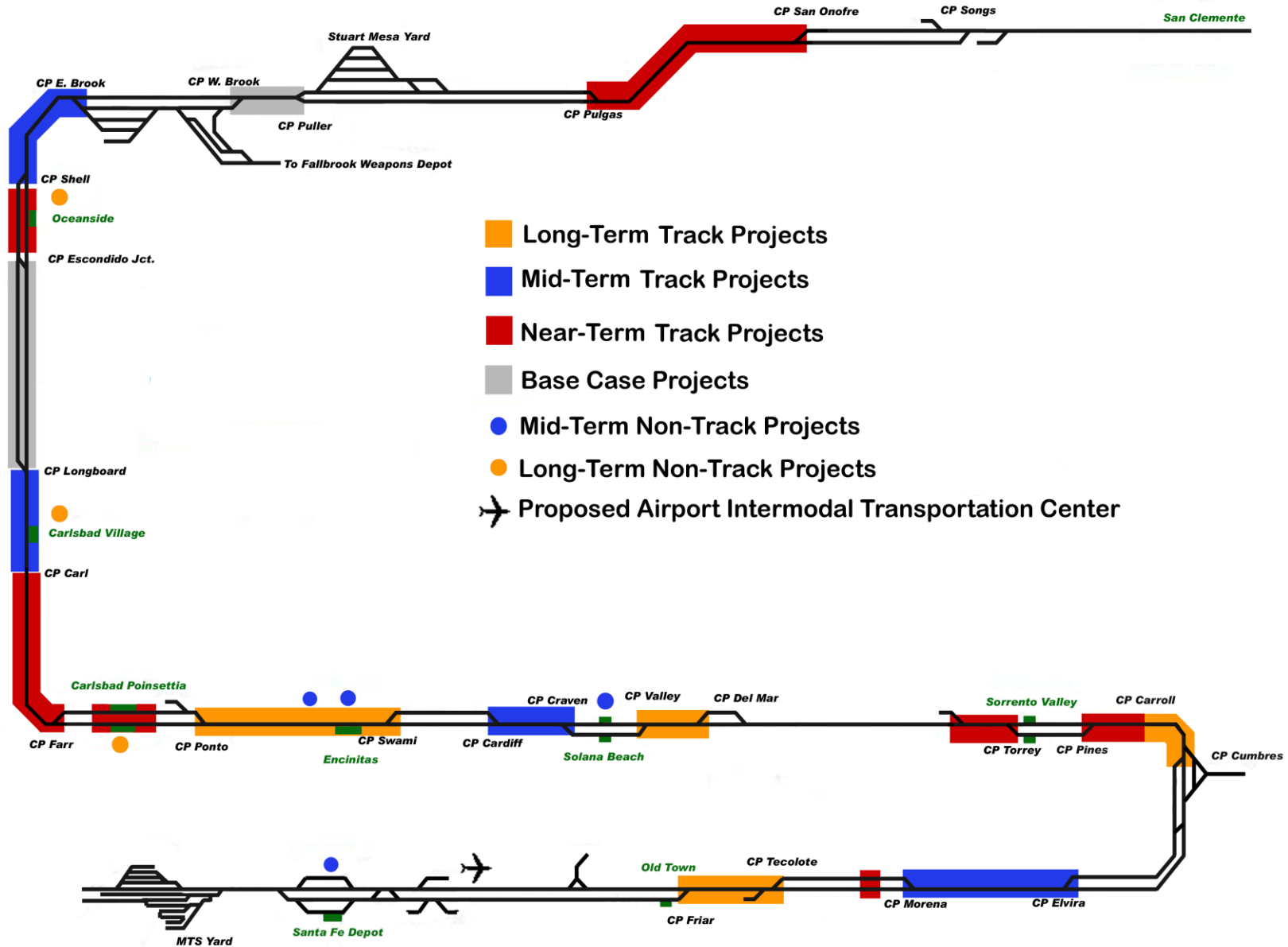
Track Projects to Support Near-Term Service Expansion



Track Projects to Support Mid-Term Service Expansion



Track Projects to Support Long-Term Service Expansion



Closing the Single-Track Gap

	Existing	Near-Term Service Expansion	Mid-Term Service Expansion	Long-Term Service Expansion
Single-Track	28.0	18.1	12.4	5.0*
Double-Track	32.1	42.0	47.7	55.1
Total Miles	60.1			

** Remaining single track sections through Del Mar (3.1 mi) and at the County line (1.9 mi).*

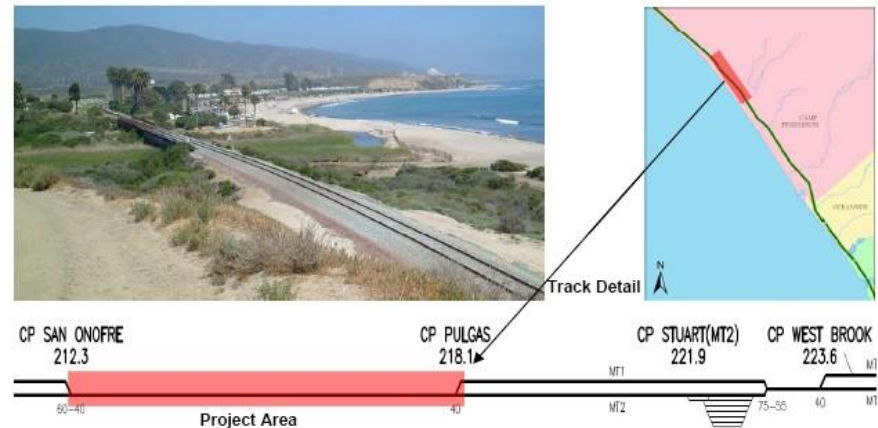
Key Issues

- **Passenger Service Schedules**
- **Role of Tunnels in Ultimate Vision**
- **Remaining Constraint Points**
- **Rail Through Del Mar**
- **Project Costs**
- **Other Needs**
 - **Layover facilities**
 - **Bridge replacement (maintenance driven)**
 - **Grade separations**
 - **Project planning**

Project Overview Sheets

LOSSAN Rail Corridor – San Diego County Projects

Project #1 – CP San Onofre to CP Pulgas



Description:	Second main track, signals, retaining wall, and bridge replacement from Control Point (CP) San Onofre to CP Pulgas in Camp Pendleton, resulting in a 12.6-mile stretch of double-track from CP Songs to CP Puller.
Extent:	Milepost (MP) 212.3 to MP 218.1 (5.8 miles)
Recommended Priority:	Near-Term Implementation. Recommended to support an initial service expansion that accommodates a 79-train weekday schedule.
Estimated Total Cost:	\$33,000,000 (\$2008)
Committed Funding:	None
Project Stage:	Planning
Project Delivery:	Environmental permitting required, low community opposition.
Rail Performance:	Provides significant travel time savings for Metrolink and BNSF. Alleviates residual delay near CP San Onofre and CP Pulgas. Provides on-time performance benefits for COASTER, Metrolink, and northbound Amtrak. Provides moderate delay benefits for BNSF.

Next Steps

- **CSMP/PWP – Integration of Rail and Highway Phases**
- **Federal Rail Stimulus Grant Applications**
- **SOFAR Settlement Agreement**
- **2050 RTP**

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